

WASTE MANAGEMENT - SOURCE REDUCTION

Source reduction (also known as waste reduction) is a solid waste management strategy that municipalities should consider when developing sustainable community plans. Source reduction can have a major impact on the amount of waste generated within a municipality and is therefore a logical starting point for those municipalities interested in managing solid waste in a more sustainable fashion.

The term source reduction is used to describe those activities that decrease the amount (weight or volume) or toxicity of waste entering the solid waste stream. It also encompasses those activities that increase product durability, reusability and repairability. Prior to embarking on a program designed to promote source reduction to residents, municipal officials must first make sure that they lead by example. Therefore, a source reduction program for all municipal offices should be developed and implemented as a way to reduce waste and promote sustainability.

Developers can also have a major impact on the amount of solid waste generated within a municipality. By incorporating source reduction into their construction and demolition plans, developers will save money and improve their bottom line while supporting the environment goals of the state and local jurisdiction.

APPLICABLE NEW JERSEY GOALS AND TARGETS

The New Jersey Statewide Mandatory Source Separation and Recycling Act, N.J.S.A. 13:1E-99.11 et seq., calls for the recycling of 50% of the municipal solid waste stream and 60% of the overall waste stream by the end of 1995.

SUGGESTED ACTIONS AND STRATEGIES

Examples of source reduction strategies that can be implemented in municipal offices include:

- Use computers to cut paper use. Post notices electronically, and send documents for review by e-mail. Let the recipient decide whether to print or not. Set up shared file systems to let people access documents without requesting a hard copy. Store files electronically only.
- Reformat fax forms to avoid a cover sheet.
- Buy printers and copiers that print on both sides. If you cannot print two-sided documents, and if you have many
 printers, you may want to designate one to be the draft printer, and print on the back of used paper.
- Reuse old folders, use old memos for scrap paper, reuse office furnishings.
- Use refillable products such as pens, pencils, tape dispensers and calendars.
- Use solar powered calculators.
- Eliminate single use cups.
- Use round-trip packaging containers and padding.
- Buy less toxic and energy efficient products.
- Visit http://www.state.nj.us/dep/dshw/recycling/source_red.htm for more ideas.



Source reduction practices, programs and strategies that can be implemented on a community-wide basis include the following:

- 1. "Grass Cut It and Leave It" programs The objective of these educational programs is to get residents to leave grass clippings on the lawn when they mow as grass clippings provide a natural and healthy fertilizer for a growing lawn. By cutting lawns short and removing the clippings, residents rob their lawn of its own natural fertilizer and create a waste that must be hauled away for disposal or recycling by a truck. This, of course, adds to the negative environmental impact of this practice since disposal vehicles use fuel and produce air pollution. By cutting lawns higher and leaving the clippings on the lawn, residents will use less water, fertilizer and pesticides, and expose themselves to fewer toxic materials. For additional information on "Cut It and Leave It" programs, visit http://www.state.nj.us/dep/dshw/recycling/brochures/recycling%20brochures/grass.pdf.
- 2. Backyard composting programs The objective of these educational programs is to get residents to reduce waste by composting food scraps and yard trimmings in a backyard compost pile. Municipalities may opt to provide backyard composting bins to those residents interested in starting a backyard compost pile. Visit http://www.state.nj.us/dep/dshw/recycling/source_red.htm for additional information.
- 3. "Pay As You Throw" programs In communities with Pay As You Throw programs (also known as per container systems, unit pricing or variable-rate pricing), residents are charged for trash collection depending on the amount of garbage that they throw away. This encourages residents to reduce the amount of waste that they generate and to separate recyclables more carefully. Twelve towns in New Jersey now use such systems. Residents from these towns believe that this type of system promotes fairness. Comparison studies show that these towns recycle more and dispose of less waste than neighboring towns. Visit the USEPA's Pay As You Throw website at http://www.epa.gov/epaoswer/non-hw/payt/index.htm.
- 4. Toxicity Reduction programs One of the main objectives of such educational programs is to inform residents about the many toxic materials found in their homes in the form of cleansers, pesticides and other household products. In addition, these programs inform residents about alternative products that contain little or no toxic constituents. Toxicity reduction programs also educate residents about the proper disposal of these materials through county household hazardous waste collection events. Residents should visit http://njhazwaste.com/index.htm for information on county household hazardous waste collection events. To learn more about this topic, visit the DEP's website at http://www.state.nj.us/dep/dshw/recycling/source_red.htm.
- 5. Materials Exchange/Reuse Information programs A materials exchange is a way by which a municipality can bring together residents who would like to discard any unnecessary or unwanted items with residents who are looking for used items in good condition. Materials exchanges are valuable to residents, as well as to the environment as they keep many materials from being disposed in landfills. A materials exchange can be set up at an established location, for example, at a recycling depot, or can be an online resource. There is typically no fee charged for the donation or acquisition of used items at such municipal materials exchanges. Reuse can also be facilitated through a more informal approach such as Lambertville's "Sparkle Week" wherein residents place unwanted large items that are typically not part of household trash out on their curb for others to take for their own use. Those materials not removed by residents for reuse purposes are collected and disposed of by the municipality.

Municipalities may choose to simply provide information to residents on organizations that accept used items for reuse purposes. For example, Habitat for Humanity's "ReStores" accept used or surplus building materials from contractors, building supply stores and the general public. Numerous other organizations that accept donated used items are listed in the NJDEP sponsored reuse guide entitled "A Place for Everything." While this guide only lists organizations located in Mercer, Middlesex and Monmouth Counties, the guide can be of help to those located in other counties, as well. Such information can be distributed as part of a comprehensive source reduction education program.



- 6. General Source Reduction Education programs A comprehensive source reduction program that highlights many of the practices described above, as well as other source reduction strategies, can be provided to residents by itself or in combination with municipal recycling information. The address for the NJDEP's website should be provided along with this information (www.state.nj.us/recyclenj click on Source Reduction link).
- 7. WasteWise Communities This new USEPA WasteWise campaign will support municipal waste reduction efforts by providing free technical assistance, resources and networking opportunities to local governments that register for this program. National recognition opportunities are available to WasteWise Communities participants. For further information, visit www.epa.gov/wastewise.
- 8. New Jersey WasteWise Business Network An organization that provides educational and networking opportunities for New Jersey businesses and organizations interested in waste reduction, recycling and recycled product procurement. For details visit http://www.nj.gov/dep/dshw/recycling/brbn03.htm.
- 9. Ordinances designed to reduce the amount of unwanted printed materials tossed onto residential driveways and lawns A recently developed waste reduction/litter prevention strategy being considered by some pioneering municipalities is the adoption of ordinances aimed at reducing and eliminating the number of advertising fliers, menus and free publications that are tossed onto lawns and driveways throughout New Jersey. Under consideration are ordinances that would establish a registry where residents would sign up to stop delivery of unsolicited material.

The following strategies are ways by which **developers** can support source reduction goals:

- Develop a source reduction strategy for the construction and demolition activities that are to take place prior to the start of the project. Retaining and protecting trees and flora in site development should be a component of this strategy. See http://www.state.nj.us/dep/dshw/recycling/trees.htm for further information.
- Develop an education program for employees so that they are aware of the company's source reduction strategy.
- Work with subcontractors to ensure that they are familiar with the source reduction strategy to be employed for the project.

STATE TECHNICAL/FINANCIAL ASSISTANCE

NJDEP, Bureau of Recycling and Planning - www.state.nj.us/recyclenj - is part of the Department of Environmental Protection's Solid and Hazardous Waste Program. It is comprised of three units - the Recycling and Market Development unit, the Grants, Loans and Data unit and the Planning unit.

FURTHER INFORMATION

California Integrated Waste Management Board - http://www.ciwmb.ca.gov/WPW/

National Waste Prevention Coalition - http://www.metrokc.gov/dnrp/swd/nwpc/

United States Environmental Protection Agency - http://www.epa.gov/epaoswer/non-hw/muncpl/reduce.htm

Author: Steven Rinaldi: September 2007

